

**Amendment**  
**U.S. Patent Application Serial No. 10/780,883**

IN THE CLAIMS:

Please amend the claims as follows.

--1(Currently amended).      A device for measuring a property of a surface comprising:

a housing with a passage defined therein;

a plurality of detection units disposed within said passage to detect traversal of said passage by an object directed therethrough; and

a control unit disposed on said housing and coupled to said detection units to determine a ~~change in a rate of traversal~~ deceleration of said object through said passage due to said surface, wherein said control unit includes:

a processor to determine said ~~change in said traversal rate~~ deceleration in accordance with detections from said detection units and to produce based on said deceleration a resultant measurement value indicative of said surface property and in relation to a predetermined scale, wherein said resultant measurement value pertains to a total distance an object travels on said surface in response to an initial predefined reference velocity; and

a display to display said resultant measurement value.

2(Currently amended).      The device of claim 1, wherein said passage includes first and second walls in facing relation and spaced apart from each other, and wherein each said detection unit includes:

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an emitter disposed in said first wall to transmit an energy signal toward said second wall; and

a detector disposed within said second wall substantially coincident with said emitter to detect said energy signal.

3(Original). The device of claim 2, wherein said energy signal is in the form of an infrared signal.

4(Original). The device of claim 1, wherein said display includes at least one of an LED display and an LCD display.

5(Original). The device of claim 1, further including:

a guide to direct said object into said passage at a desired velocity.

6(Original). The device of claim 5, wherein said guide includes:

a track member to receive and direct said object into said passage; and

a stand to elevate a portion of said track member relative to said surface to enable said object to traverse said track member and attain said desired velocity.

7(Original). The device of claim 1, wherein said surface includes a golf green and said scale corresponds to speed values for said golf green.

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8(Original). The device of claim 1, wherein said housing further includes a level unit to indicate a slope of said surface.

9(Original). The device of claim 1, wherein said control unit includes a power source and said display includes a power indicator to indicate a power level of said power source.

10(Original). The device of claim 1, wherein said display includes at least one of a decimal point and a detector indicator to indicate detection of said object within said passage by said detection units.

11(Original). The device of claim 1, wherein said control unit includes a plurality of detector indicators to indicate detection of said object within said passage by said detection units.

12(Original). The device of claim 1, wherein said passage includes a first pair of detection units disposed toward a first end of said passage and separated by a first predetermined distance and a second pair of detection units disposed toward an opposing end of said passage and separated by a second predetermined distance.

13(Original). The device of claim 12, wherein said processor includes:  
a first interval module to measure elapsed time for said object to travel between said first pair of detection units; and

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a second interval module to measure elapsed time for said object to travel between said second pair of detection units.

14(Original). The device of claim 13, wherein said processor further includes:

an index module to determine an index value corresponding to a ratio of said elapsed times measured by said first and second interval modules; and

a retrieval module to retrieve a corresponding value from a storage unit based on said index value, wherein said retrieved value serves as said resultant measurement value.

15(Original). The device of claim 14, wherein said values stored within said storage unit correspond to surface property values determined in accordance with prior surface measurements.

16(Original). The device of claim 1, wherein said object includes a golf ball.

17(Currently amended). A method of measuring a property of a surface comprising:

(a) receiving an object within a passage defined in a housing, wherein a plurality of detection units are disposed within said passage;

(b) detecting traversal of said passage by said object directed therethrough via said plurality of detection units;

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- (c) determining ~~a change in a rate of traversal~~ deceleration of said object through said passage due to said surface in accordance with detections from said detection units;
- (d) producing a resultant measurement value indicative of said surface property and in relation to a predetermined scale based on said determined ~~rate change~~ deceleration, wherein said resultant measurement value pertains to a total distance an object travels on said surface in response to an initial predefined reference velocity; and
- (e) displaying said resultant measurement value on a display.

18(Currently amended). The method of claim 17, wherein said passage includes first and second walls in facing relation and spaced apart from each other, and step (b) further includes:

- (b.1) each said detection unit transmitting an energy signal from said first wall toward said second wall via an emitter disposed in said first wall and detecting said transmitted energy signal via a detector disposed within said second wall substantially coincident with said emitter.

19(Original). The method of claim 18, wherein said energy signal is in the form of an infrared signal.

20(Original). The method of claim 17, wherein step (e) further includes:

- (e.1) displaying said resultant measurement value on at least one of an LED display and an LCD display.

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21(Original). The method of claim 17, wherein step (a) further includes:

(a.1) directing said object into said passage at a desired velocity via a guide.

22(Original). The method of claim 21, wherein said guide includes a track member to receive and direct said object, and step (a.1) further includes:

(a.1.1) elevating a portion of said track member relative to said surface to enable said object to traverse said track member and attain said desired velocity.

23(Original). The method of claim 17, wherein said surface includes a golf green and said scale corresponds to speed values for said golf green.

24(Original). The method of claim 17, wherein step (a) further includes:

(a.1) measuring and indicating a slope of said surface.

25(Original). The method of claim 17, wherein said housing includes a power source, and wherein step (e) further includes:

(e.1) displaying a power indicator to indicate a power level of said power source.

26(Original). The method of claim 17, wherein step (b) further includes:

(b.1) enabling at least one detector indicator to indicate detection of said object within said passage by said detection units.

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27(Original). The method of claim 17, wherein said passage includes a first pair of detection units disposed toward a first end of said passage and separated by a first predetermined distance and a second pair of detection units disposed toward an opposing end of said passage and separated by a second predetermined distance, and step (c) further includes:

(c.1) measuring elapsed time for said object to travel between said first pair of detection units; and

(c.2) measuring elapsed time for said object to travel between said second pair of detection units.

28(Original). The method of claim 27, wherein step (d) further includes:

(d.1) determining an index value corresponding to a ratio of said measured elapsed times; and

(d.2) retrieving a corresponding value from a storage unit based on said index value, wherein said retrieved value serves as said resultant measurement value.

29(Original). The method of claim 28, wherein said values stored within said storage unit correspond to surface property values determined in accordance with prior surface measurements.

30(Currently amended). The method of claim ~~[[1]]~~ 17, wherein said object includes a golf ball.--